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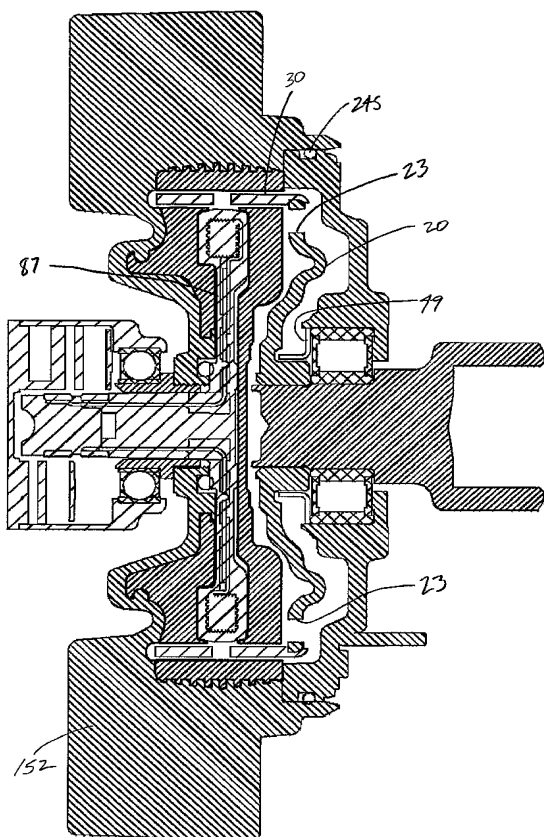
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(54) Title: VISCOUS FLUID CLUTCH ASSEMBLY



(57) Abstract: A viscous fluid clutch (1) for use as a clutch for a cooling fan for a vehicle, the clutch includes an input shaft (10), a rotor assembly (20, 30), a first housing portion (52), a second housing portion (42), a coil assembly (80), and a brush box (105). The rotor assembly is coupled to the input shaft. The first housing portion is coupled to the second housing portion and the second housing portion is rotatably disposed on the input shaft. The first and second housing portions define a fluid reservoir (16) for receiving the rotor assembly and a viscous fluid, preferably of the magnetorheological type. The coil assembly is coupled to the first housing portion. The brush box is operably coupled to the coil assembly. When the coil assembly is energized by the brush box, a magnetic field is created that acts upon the magnetorheological fluid to vary the torque transfer of the input shaft to the housing and the fan connected thereto.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW,

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